

Abstract

A predicted value of acid consumption during pickling with a pickling solution in each of a third tank 11c and a final tank 11d of a continuous pickling apparatus 10 is calculated by a pickling line control unit 24, and based on the calculated predicted value, the amount of acid solution to be supplied to each of the third tank 11c and the final tank 11d is determined, and acid solution is supplied from an acid solution supply system 12. The acid concentration of the pickling solution in each of the third tank 11c and the final tank 11d to which acid solution is supplied is continuously measured by continuous acid concentration measuring devices 13c and 13d, and based on the continuously measured value of the measured acid concentration, acid solution is supplied from the pickling solution supply system 12 to the third tank 11c and the final tank 11d so that the concentration of the pickling solution in each of the third tank 11c and the final tank 11d matches a target value. As a result, while the acid concentration of the pickling solution in the final pickling tank is suppressed to at most 12%, the acid concentration of the pickling solution in the other pickling tanks can be raised to a desired value.